

REMARKS

This application has been reviewed in light of the Office Action dated January 2, 2004 (Paper No. 24). Claims 1 to 60 are in the application, of which Claims 1, 18, 35 and 52 to 60 are the independent claims. Reconsideration and further examination are respectfully requested.

Claims 1 to 60 were rejected under 35 U.S.C. § 102(e) over Inside AutoCAD 14, July 1997, chapters 16, 17 (Beall). The rejection is respectfully traversed.

Claim 1 recites a method of generating a graphical object comprising a plurality of closed loops. In a first providing step a set of one or more closed first curves is provided, defining a boundary of a surface. The set of one or more closed first curves contains no self-crossover points. In a second providing step, a set of continuous second curves are provided, lying on the surface defined by the closed first curves. Each of the continuous second curves intersects and crosses over one or more of the closed first curves. The set of continuous second curves contains no self-crossover points, and the second curves do not intersect one another. A set of intersection points is determined, these points being points where the one or more closed first curves intersect the continuous second curves and which lie on the boundary of the surface. A set of crossover points is determined from the determined set of intersection points. In an assembling step, a plurality of closed loops is assembled from curve intervals, delimited by adjacent determined crossover points, from the set of one or more closed first curves and the set of continuous second curves in accordance with a predetermined rule, whereby the plurality of closed loops abuts a substantial portion of the boundary of the surface. In a filling step, the plurality of closed loops is filled to produce the graphical object.

Chapter 17 of Beall describes how to draw hatch patterns using AutoCAD 14.

Page 4 of chapter 17 describes how hatch boundaries may be defined. The boundaries of the area to be filled are defined either by a user choosing Pick Points or by the user selecting objects that enclose the area to be filled.

Using the Pick Points method, the user picks a point inside the area that is to be filled. This point is referred to as an internal point. The overall hatch area can then be automatically delineated by BHATCH. Alternatively, the user can select the objects that define the area to be hatched. If more than one boundary object exists, the objects must meet end-to-end.

Applicant respectfully submits that this operation of Beall is entirely different from the method of Claim 1, such that the rejection under § 102(a) cannot be sustained. While it is true that anticipation is not an *ipsissimis verbis* test, it is well established that “[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” MPEP § 2131 (quoting *Verdegaal Bros. V. Union Oil Co. Of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987) (emphasis added). Moreover, “[t]he identical invention must be shown in as complete detail as is contained in the ... claim.” MPEP § 2131 (Quoting *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

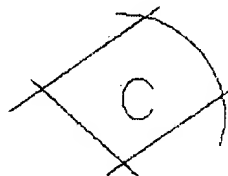
The first step of Claim 1 is a providing step of providing a set of one or more closed first curves defining a boundary of a surface, wherein the set of one or more closed first curves contains no self-crossover point. The Office Action is entirely silent regarding the features of Beall that are seen to be closed first curves containing no self-crossover points.

The second step of Claim 1 is a providing step of providing a set of continuous second curves lying on the surface. Claim 1 defines three limitations of the second curves:

1. Each of the second curves intersects and crosses over one or more of the closed first curves;
2. Each second curve does not intersect other ones of the second curves; and
3. The set of second curves contains no self-crossover points.

The Office Action asserts that "Beall discloses on page 4, defining the area for hatching, as an area with a series of lines that cross over and does not meet, chapter 17, page 4". Thus, the Office Action interprets the hatch boundary as being the second curves of Claim 1.

Applicant presumes that this discussion of Beall refers to the passage on page 4 discussing Area C of Fig. 17.4, which "is defined with several lines and an arc that cross over each other and do not meet end-to-end" (emphasis added). It appears that the Office Action misreads the citation, as the curves that make up the hatch boundary of Area C definitely meet one another, although they do not meet end-to-end. Area C has the following form:



The hatch boundaries do not satisfy limitation 2, since the lines making up the hatch boundary cross other lines making up the hatch boundary. In addition, the Office Action fails to indicate how the hatch boundary lines in the citation are seen to cross over one or more of the closed first curves.

The third step of Claim 1 is a step of determining a set of intersection points, wherein the intersection points are those points where the one or more closed first curves intersect the continuous second curves and which lie on the boundary of the surface.

Regarding this step, the Office Action asserts that "Beall discloses defining a area to be filled as the boundary objects and selecting objects to define the area to be hatch having points that define the area, chapter 17, page 4".

Since the Office Action does not indicate where the citation teaches closed first curves as claimed, and the hatch boundaries do not satisfy the claimed limitations of the second curves, it is submitted that the citation does not teach or suggest this determining step of Claim 1.

The next step of Claim 1 is a second determining step of determining a set of crossover points from the determined set of intersection points. In this regard the Office Action asserts that "Beall discloses defining an area with cross over each other and defining the area as a boundary object, chapter 17, page 4". Applicant is unclear as to how this anticipates the second determining step, and respectfully submits that it does not.

The next step of Claim 1 is an assembling step of assembling the plurality of closed loops from curve intervals, delimited by adjacent determined crossover points, from the set of one or more closed first curves and the set of continuous second curves in accordance with a predetermined rule, whereby the plurality of closed loops abuts a substantial portion of the boundary of the surface.

Regarding this step, the Office Action comments that “Beall discloses defining the hatch boundaries”. This appears to overlook the working interaction between the preceding steps of Claim 1, at least for the reason that the Office Action earlier equated the hatch boundaries with the second curves. In Applicant’s understanding, the citation is entirely silent on the interaction between the first and second curves, the intersection points, the crossover points, and the assembly of closed loops as claimed.

As discussed above, Beall does not set forth each and every element of Claim 1. For at least this reason, it is submitted that Claim 1 is not anticipated by Beall.

Claims 18 and 35 are, respectively, an apparatus and a computer program product claim corresponding to the method of Claim 1. For at least the reasons given above with respect to Claim 1, Claims 18 and 35 are believed patentable in light of Beall.

Claim 52 is a method claim similar to Claim 1, but wherein the method is applied to modifying a typeface, font or character. Consequently, for reasons analogous to those given with respect to Claim 1, Claim 52 is believed patentable in light of Beall.

Claims 53 and 54 are, respectively, apparatus and computer program product claims corresponding to the method of Claim 52, and are believed patentable in light of Beall for at least the reasons discussed above.

Claim 55 teaches a method of modifying a type face, font or character. The method comprises two providing steps and a step of determining a set of intersection points, which are the same as corresponding step of Claim 52. As discussed above, it is submitted that Beall does not teach the provision of closed first curves and continuous second curves having the limitations recited in Claim 55. For at least this reason, Beall is not seen to anticipate Claim 55.

Furthermore, Claim 55 teaches the steps of selecting unmarked adjacent crossover points from the set of determined crossover points to form a closed loop. The selected adjacent crossover points are marked, and the selecting and marking steps are repeatedly performed until a set of closed loops has been formed, wherein the set of closed loops abuts a substantial portion of the boundary of the surface. The plurality of closed loops is then filled with a fill to form the modified type face, font or character. It is submitted that there is no teaching of such selecting and marking steps in Beall. Accordingly, Claim 55 is believed patentable in light of Beall.

Claims 56 and 57 are, respectively, apparatus and computer program product claims corresponding to Claim 55, and are believed patentable for at least the reasons given above with respect to Claim 55.

Claim 58 teaches a method for generating a graphical object comprising a plurality of closed loops by transforming a set of closed first curves defined on a surface. The method provides a pattern comprising a set of continuous second curves upon the surface and intersecting the set of closed first curves. Each continuous second curve does not intersect other ones of the continuous second curve. The method then determines crossover points of the intersections of the set of first curves and the set of second curves. Closed loops are generated in accordance with the crossover points, wherein the set of closed loops abuts a substantial portion of the boundary of the surface. The closed loops are filled with a predetermined color to produce the graphical object.

As discussed above, Beall does not teach or suggest the claimed configuration of closed first curves and continuous second curves, from which crossover points are determined so as to generate closed loops. Accordingly, method Claim 58 and its corresponding apparatus and computer program product Claims 59 and 60 are believed patentable in light of Beall.

The other pending claims in this application are each dependent from the independent claims discussed above and are therefore believed patentable for the same reasons. Because each dependent claim is also deemed to define an additional aspect of the invention, however, the individual consideration of each on its own merits is respectfully requested.

Applicant's undersigned attorney may be reached in our Costa Mesa, CA office at (714) 540-8700. All correspondence should continue to be directed to our below-listed address.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Michael K. Dineil", is written over a horizontal line.

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